DOCUMENT RESUME

ED 261 178 CE 042 323

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TITLE	Printers' System of Measure. Fordson Bilingual Demonstration Project.
INSTITUTION	Dearborn Public Schools, Mich.
SPONS AGENCY	Department of Education, Washington, DC.
PUB DATE	85
NOTE	23p.; For related documents, see CE 042 318-325.
AVAILABLE FROM	Dearborn Public Schools, 4824 Lois Avenue, Dearborn, MI 48126 ($1.50; more than 10--$1.00 each).
PUB TYPE	Multilingual/Bilingual Materials (171) -- Guides - Classroom Use - Materials (For Learner) (051)
LANGUAGE	English; Arabic
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Arabic; Behavioral Objectives; Bilingual Education Programs; Bilingual Instructional Materials; Graphic Arts; Industrial Arts; Learning Activities; Learning Modules; Limited English Speaking; *Measurement; Pretests Posttests; *Printing; Pronunciation Instruction; Secondary Education; Trade and Industrial Education; Vocabulary Development; Vocational Education; *Vocational English (Second Language)

ABSTRACT

This vocational instructional module on the printers' system of measure is one of eight such modules designed to assist recently arrived Arab students, limited in English proficiency (LEP), in critical instructional areas in a comprehensive high school. Goal stated for this module is for the student enrolled in graphics courses to learn the printers' system of measure. Each module consists of these parts: title; program goal and performance objectives; a pronunciation key; a language page which offers the pronunciation, definition, and usage of key terms in English and in Arabic; a pretest; bilingual (English and Arabic) language (vocabulary and usage) activities; evaluation; pretest and activity answer sheets; and a list of supplementary materials and their location. For each of the four activities in this module the objective, a list of materials needed, procedure, and evaluation are provided in addition to the necessary activity sheets or pages. (YLB)

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FORDSON BILINGUAL DEMONSTRATION PROJECT

برنامج فوردسون النموذجي الثنائي اللغة

PRINTERS' SYSTEM of MEASURE

نظام القياس عند الطباعين

U.S. DEPARTMENT OF EDUCATION
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ABOUT THE **PROJECT**

The Fordson Arabic Bilingual Demonstration Project is designed to assist recently arrived Arab students, limited in English proficiency (LEP), to adapt to a large and comprehensive high school. The project consists of academic and vocational instructional modules, reading services to teachers and students, bilingual aide and resource services, computer and television modules, staff development activities, and home-community liaison.

ABOUT THE INSTRUCTIONAL **MODULES**

The modules were designed to assist LEP students in critical instructional areas throughout the school curriculum. These areas of focus were determined by a needs survey of the entire Fordson school community. Each module consists of seven parts: title, objectives, pretest, language (vocabulary and usage) activities, evaluation, and supplementary materials. Modules were translated, duplicated, and field tested.

ABOUT THE **AUTHOR**

Ray Pizzino did his undergraduate work at Wayne State University and his graduate work at the University of Michigan. Ray has worked for ten years in Dearborn in the Industrial Arts Department teaching Automotive, Printing, and Graphics. The major concepts of this unit were those defined as critical for beginning limited English proficiency students in Graphics.

FORDSON BILINGUAL DEMONSTRATION CENTER

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Special Acknowledgement:

The interest, concern, and committment of Mr. Harvey Failor, Principal of Fordson High School from 1964-1982, to the Demonstration Project was a source of strength and inspiration to us all.

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This Project was supported by the United States Department of Education.

The contents of this instructional module were developed under a grant for the United States Department of Education. However, those contents do not necessarily represent the policy of that agency, and you should not assume endorsement by the Federal Government.

الفنـــــــون التخطيطيـــــــــة

نظـــام القيـــــــاس عنـــــد الطبّـــاعيـــن

GRAPHIC ARTS

PRINTERS SYSTEM OF MEASURE

Developed By: اعـداد

Ray Pizzino راي بيزينو

This bilingual module has been developed to assist limited English proficiency students in learning the Printers' System of Measure. The unit is designed for students enrolled in graphics courses.

GENERAL OBJECTIVE:

Using a line gauge, the student will be able to measure width and length of copy and line length in printers' terms.

SPECIFIC OBJECTIVES:

Given 2-6 examples of copy, the student within one week will:

1. Measure the width of various copy in inches, and convert it to picas and points with 100% accuracy.

2. Measure the depth (length) of various copy in inches, and convert it to picas and points with 100% accuracy.

3. Measure line length in inches, and convert it to picas and points with 100% accuracy.

PRETEST اختبار تمهيدي

DIRECTIONS: Write the answers to the following questions in the space provided.

تعليمات : اكتب الاجوبة للمسائل التالية في الفراغ المتوفر .

1. 2 picas = _____ points. ١ - ٢ بيكا = _____ بنطا"

2. 12 picas = _____ points. ٢ - ١٢ ابيكا = _____ بنطا"

3. 1 inch = _____ points. ٣ - ١ إنش = _____ بنطا"

4. 6 inches = _____ points. ٤ - ٦ إنش = _____ بنطا"

5. 2 inches = _____ points. ٥ - ٢ إنش = _____ بنطا"

6. 3 picas = _____ points. ٦ - ٣ بيكا = _____ بنطا"

7. 4 picas = _____ points. ٧ - ٤ بيكا = _____ بنطا"

8. 9 picas = _____ points. ٨ - ٩ بيكا = _____ بنطا"

9. 3 ½ inches = _____ points. ٩ - ١/٢ ٣ إنش = _____ بنطا"

10. 1 ½ inches = _____ points. ١٠ - ١/٢ ١ إنش = _____ بنطا"

PRONUNCIATION KEY

/a/ as in Adam

/ā/ as in cake

/e/ as in let

/ē/ as in meet

/i/ as in sit

/ī/ as in ice cream

/o/ as in hot

/ō/ as in Coke

/u/ as in Seven Up

/ū/ as in blue

/b/ as in boy

c equals /s/ as in cents (10¢)
/k/ as in cat

/d/ as in day

/f/ as in four

g equals /g/ as in go
/dz/ as in page

/h/ as in he

j equals /dz/ as in jail

/k/ as in kick

/l/ as in Cola

/m/ as in man

/n/ as in man

/p/ as in Dr. Pepper

qu equals /kw/ as in quit

/r/ as in run

/s/ as in sun

/t/ as in ten

/v/ as in van

/w/ as in woman

/x/ as in extra

/y/ as in yet (sometimes /ē/ as in many)

/z/ as in zebra

/sh/ as in shut

/ch/ as in church

/ng/ as in sing

/th/ (voiced) as in this

/th/ (unvoiced) as in thing

oo equals /ū/ as in food
/u/ as in good .

LANGUAGE PAGE — صفحة لغة

DIRECTIONS: Read, pronounce, spell, and use in a sentence the words listed below.

تعليمات : إقرأ ، ألفظ ، هجيء ، ثم إستعمل الكلمات المذكورة أدناه في جمل .

copy (ko'pi) — نسخة
length (lenkth) — طول
line gauge (līn gāj) — معيار خط
line length (līn lenkth) — طول خط
picas (pī' kas) — بيكا
points (points) — بنوط (مفردها بنط)
width (width) — عرض

1. copy
   any furnished material, words and pictures to be printed

١ – نسخة
اية مادة مجهزة ، كلمات ، وصور كي تطبع .

The printer must always measure copy accurately.

يجب على الطباع قياس نسخة الطباعة بدقة .

2. length
   how long a thing is

٢ – طول
ما هو طول شيء

The length of a ruler is 12 inches.

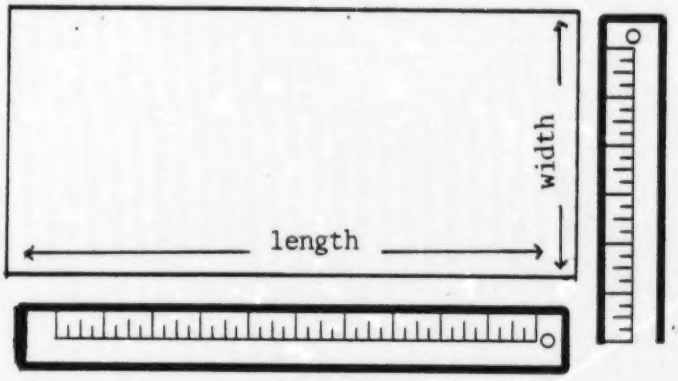
يساوي طول المسطرة ١٢ إنشا .

3. width
   how wide a thing is

٣ – عرض
ما هو عرض شيء

The width of the river is 15 feet.

يبلغ عرض النهر ١٥ قدما" .



LANGUAGE PAGE (continued)

4. line gauge

printers' ruler, calibrated in inches, picas, and half picas.

The line gauge is used to measure copy.

٤ - كعيار الخـــط

تقسم سطرة الطبّاع البوصات وبيكات ،وانصاف بيكات .

يستعمل معيار الخط القياس نسخة .

5. line length

the length of a line of type

The line length of this copy is three inches.

٥ - طول الخـــط

طول خط الحرف الطباعي
ان طول خذه النسخة
هو ثلاثة بوصات .

6. pica

printers' unit of measure
1 pica equals 1/6 of an inch

Six picas equal one inch.

٦ - بيكـــا

وحدة قياس لدي الطباعين
ان بيكا واحدة تساوي ١/٦ البوصة

البوصة الواحدة تساوي ست بيكـات .

7. point

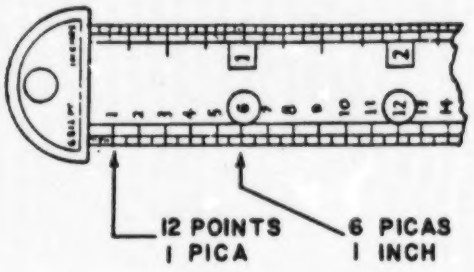
printers' unit of measure
12 points equals 1 pica

Seventy-two (72) points equal one inch.

٧ - بنـط

وحدة قياس لدي الطبّاعين
ان ١٢ بنطا" تساوي بيكا واحدة

ان اثنتان وسبعين (٧٢) بنطا" تساوي بوصة واحدة .



To the student:

للطـــــالب

You are going to learn:
to convert inches to picas and points.

سوف تتعلم
كيف تحول بوصات الى بيكات وبنقوط .

In order to do this you will be given:
a pencil and a line guage

لكي تقوم بهذا الامر ،سوف تعطي :
قلم رصاص ومعيار خط

You will be doing the following:
reading and measuring the standard printers' measures:

سوف تقوم بما يلي :
قراءة وقياس مقاييس الطباعين المعترف بها (المعتمدة)

6 picas = 1 inch
12 points = 1 pica
72 points = 1 inch

٦ بيكات = ١ بوصة
١٢ بنطا" = ١ بيكا
٧٢ بنطا" = ١ بوصة

We will know you can do this when:
you have completed the post-test evaluation with 80% accuracy.

سنعرف ان بوسعك القيام بهذا الامر عندما :
تكمل "الاختبار اللاحق" التقويمي بدقة
تعادل ٨٠ ٪ .

STUDENT ACTIVITY 1

DIRECTIONS:

On this worksheet you see several lines. Use your line gauge to measure each line, and write its length in inches, picas and points.

تعليمات :

امامك عدة خطوط على هذه الصفحة . استعمل "معيار الخط" الذي معك لتقييس كل خط ثم اكتب طوله بالبوصات والبيكات والبنوط .

Example: _____ = 1¼ inches

_____ = 7½ picas

_____ = 90 points

مثل : _____ = ١ ١/٤ بوصة

_____ = ٧ ١/٢ بيكات

_____ = ٩٠ بنطا"

(1)

_____ = inch

_____ = pica

_____ = points

(١)

_____ = بوصة

_____ = بيكا

_____ = بنطا"

(2)

_____ = inch

_____ = picas

_____ = points

(٢)

_____ = بوصة

_____ = بيكات

_____ = بنطا"

(3)

_____ = inch

_____ = picas

_____ = points

(٣)

_____ = بوصة

_____ = بيكا

_____ = بنطا"

STUDENT ACTIVITY 1 (continued)

(4) (٤)

_____ = inch بوصة = _____

_____ = picas بيكات = _____

_____ = points بنطا" = _____

(5) (٥)

_____ = inch بوصة = _____

_____ = picas بيكا" = _____

_____ = points بنطا" = _____

(6) (٦)

___ = inch بوصة = _____

___ = picas بيكا = _____

___ = points بنطا" = _____

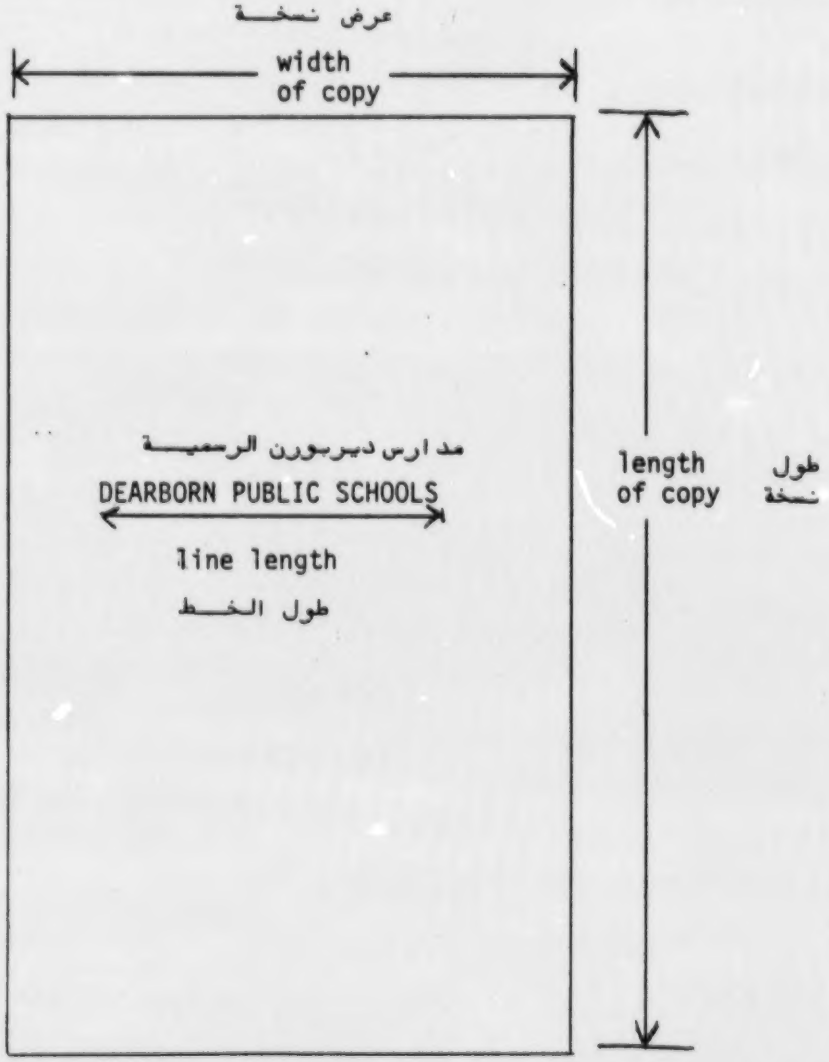
STUDENT ACTIVITY 2

OBJECTIVE:
Given examples, you will learn to identify copy, width of copy, length of copy and line length.

هدف :
من خلال الامثلة التي ستعطى لك،سوف تتعلم التعرف على : نسخة ،عرض نسخة ،طول نسخة وعلى طول خط .

DIRECTIONS:
Study this example of length, width, line length, and copy.

تعليمات :
ادرس هذا المثل للطول ،والعرض وطول الخط والنسخة .



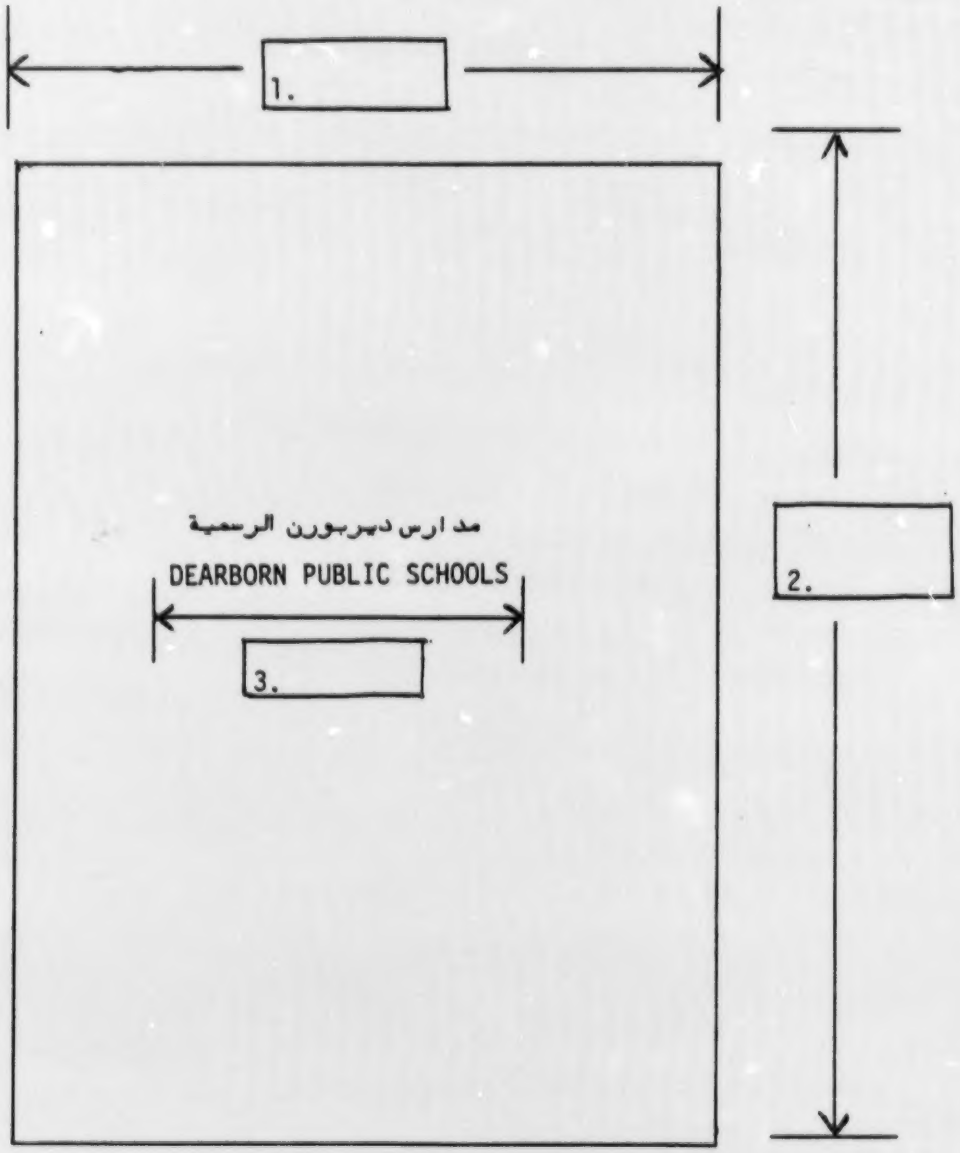
The enclosed area above is the copy.

المساحة المنورة اعلاه هي نسخة

STUDENT ACTIVITY 2 (continued)

DIRECTIONS:
On the example below fill in the boxes with the correct terms.

تعليمات
ضع داخل المستطيلات المرقمة من (١) الى (٤) ما يناسبها من عبارات .



The enclosed area above is the: 4.

المنطقة المصوّرة اعلاه هي :

STUDENT ACTIVITY 3

DIRECTIONS:

Using a line gauge, measure the width of the copy in inches.

a. The width is _____ inches.

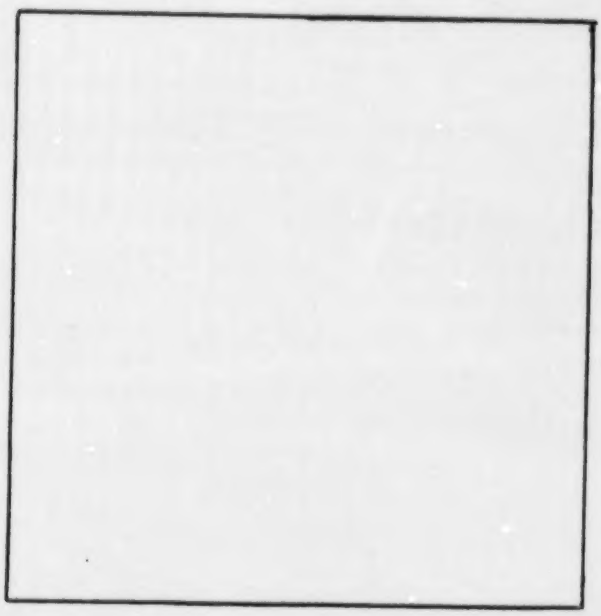
b. The width is _____ picas.

تعليمات :

مستعملا" معيار الخط ،قس عرض النسخة بالبوصة ·

أ ـ العرض يساوي _____ بوصة

ب ـ العرض يساوي _____ بيكات



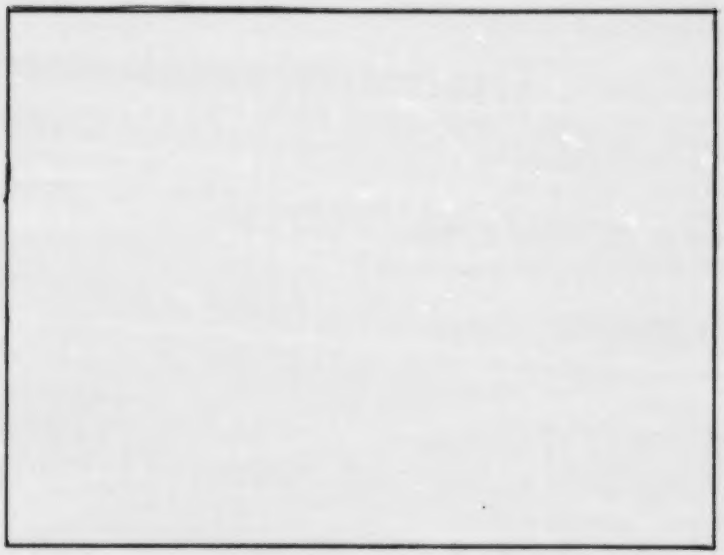
STUDENT ACTIVITY 4

DIRECTIONS:
Using a line gauge measure the length in picas.

تعليمات
استعمل معيار الطول لقياس الطول بالبيكا .

a. The length is _____ picas.
b. The length is _____ inches.

أ ـ يبلغ الطول _____ بيكا" .
ب ـ يبلغ العرض _____ بوصات .



STUDENT ACTIVITY 5

DIRECTIONS:
Using a line guage measure the line length in picas, points and inches.

تعليمات
استعمل معيار الطول لقياس طول الخط بالبيكا والبونط والبوصة .

a. The line length is _____ picas.
b. The line length is _____ points.
c. The line length is _____ inches.

ا ـ يبلغ طول الخط _____ بيكا"
ب ـ يبلغ طول الخط _____ بونطا"
ج ـ يبلغ طول الخط _____ بوصات

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مدارس ديربورن الرسمية

EVALUATION

Use pretest for post-test evaluation.

OPTIONAL HOMEWORK ACTIVITY:

Have the students bring to class examples from newspapers or magazines copy of different advertisements, showing the various dimensions: width, length, line length.

ANSWER KEY

STUDENT ACTIVITY 1

1. 3/4 inch
   4 1/2 picas
   54 points

2. 1 1/2 inch
   9 picas
   108 points

3. 2 inches
   12 picas
   144 points

4. 1/2 inch
   3 picas
   36 points

5. 2 1/4 inch
   13 1/2 picas
   162 points

6. 1/4 inch
   1 1/2 picas
   18 points

STUDENT ACTIVITY 2

1. width
2. length
3. line length
4. copy

STUDENT ACTIVITY 3

a. 3 1/4
b. 19 1/2

STUDENT ACTIVITY 4

a. 18
b. 3

STUDENT ACTIVITY 5

a. 12
b. 144
c. 2

EVALUATION

1. 24
2. 2
3. 72
4. 36
5. 144
6. 1/2
7. 48
8. 1 1/2
9. 21
10. 108

SUPPLEMENTARY MATERIALS

Printing Layout and Design by Delmar	Fordson Print Shop
Photo Offset Fundamentals by John E. Cogoli	Fordson Print Shop
Overhead Transparency (Student Activity 2)	Fordson Print Shop